F Xavier Espinach

List of Publications by Year
in descending order

88 papers	2,109 citations	186265 28 h-index	289244 40 g-index
89 all docs	89 docs citations	89 times ranked	1510 citing authors

#	Article	IF	Citations
1	Maleic Anhydride Polylactic Acid Coupling Agent Prepared from Solvent Reaction: Synthesis, Characterization and Composite Performance. Materials, 2022, 15, 1161.	2.9	12
2	Sustainable plastic composites by polylactic acid-starch blends and bleached kraft hardwood fibers. Composites Part B: Engineering, 2022, 238, 109901.	12.0	13
3	Environmental Assessment of Underdrain Designs for Granular Media Filters in Drip Irrigation Systems. Agriculture (Switzerland), 2022, 12, 810.	3.1	2
4	Approaching a Zero-Waste Strategy in Rapeseed (Brassica napus) Exploitation: Sustainably Approaching Bio-Based Polyethylene Composites. Sustainability, 2022, 14, 7942.	3.2	7
5	Stiffening Potential of Lignocellulosic Fibers in Fully Biobased Composites: The Case of Abaca Strands, Spruce TMP Fibers, Recycled Fibers from ONP, and Barley TMP Fibers. Polymers, 2021, 13, 619.	4.5	10
6	Bacterial Cellulose Network from Kombucha Fermentation Impregnated with Emulsion-Polymerized Poly(methyl methacrylate) to Form Nanocomposite. Polymers, 2021, 13, 664.	4.5	16
7	REPLANNING AN EXPERIMENTAL PROJECT FROM THE MIDDLE: THE NECESSITY OF RESULTS AND THE LACK OF TIME. , 2021, , .		0
8	Advances in Natural Fibers and Polymers. Materials, 2021, 14, 2607.	2.9	12
9	Nanocomposites Materials of PLA Reinforced with Nanoclays Using a Masterbatch Technology: A Study of the Mechanical Performance and Its Sustainability. Polymers, 2021, 13, 2133.	4.5	16
10	Nanoclay Effect into the Biodegradation and Processability of Poly(lactic acid) Nanocomposites for Food Packaging. Polymers, 2021, 13, 2741.	4.5	16
11	Exploring the Potential of Cotton Industry Byproducts in the Plastic Composite Sector: Macro and Micromechanics Study of the Flexural Modulus. Materials, 2021, 14, 4787.	2.9	4
12	Characterization of CaCO3 Filled Poly(lactic) Acid and Bio Polyethylene Materials for Building Applications. Polymers, 2021, 13, 3323.	4.5	6
13	Biobased polyamide reinforced with natural fiber composites. , 2021, , 141-165.		2
14	Effective Youngâ€™s Modulus Estimation of Natural Fibers through Micromechanical Models: The Case of Henequen Fibers Reinforced-PP Composites. Polymers, 2021, 13, 3947.	4.5	8
15	Impact Strength and Water Uptake Behavior of Bleached Kraft Softwood-Reinforced PLA Composites as Alternative to PP-Based Materials. Polymers, 2020, 12, 2144.	4.5	12
16	Leather Waste to Enhance Mechanical Performance of High-Density Polyethylene. Polymers, 2020, 12, 2016.	4.5	16
17	Study on the Macro and Micromechanics Tensile Strength Properties of Orange Tree Pruning Fiber as Sustainable Reinforcement on Bio-Polyethylene Compared to Oil-Derived Polymers and Its Composites. Polymers, 2020, 12, 2206.	4.5	12
18	Effect of NaOH Treatment on the Flexural Modulus of Hemp Core Reinforced Composites and on the Intrinsic Flexural Moduli of the Fibers. Polymers, 2020, 12, 1428.	4.5	4

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19	Effect of the Fiber Treatment on the Stiffness of Date Palm Fiber Reinforced PP Composites: Macro and Micromechanical Evaluation of the Youngâ€™s Modulus. Polymers, 2020, 12, 1693.	4.5	25
20	Enhancing the Mechanical Performance of Bleached Hemp Fibers Reinforced Polyamide 6 Composites: A Competitive Alternative to Commodity Composites. Polymers, 2020, 12, 1041.	4.5	18
21	Feasibility of Barley Straw Fibers as Reinforcement in Fully Biobased Polyethylene Composites: Macro and Micro Mechanics of the Flexural Strength. Molecules, 2020, 25, 2242.	3.8	15
22	Influence of lignin content on the intrinsic modulus of natural fibers and on the stiffness of composite materials. International Journal of Biological Macromolecules, 2020, 155, 81-90.	7.5	23
23	Impact Properties and Water Uptake Behavior of Old Newspaper Recycled Fibers-Reinforced Polypropylene Composites. Materials, 2020, 13, 1079.	2.9	17
24	High-Yield Lignocellulosic Fibers from Date Palm Biomass as Reinforcement in Polypropylene Composites: Effect of Fiber Treatment on Composite Properties. Polymers, 2020, 12, 1423.	4.5	13
25	Topography of the Interfacial Shear Strength and the Mean Intrinsic Tensile Strength of Hemp Fibers as a Reinforcement of Polypropylene. Materials, 2020, 13, 1012.	2.9	4
26	Research on the Strengthening Advantages on Using Cellulose Nanofibers as Polyvinyl Alcohol Reinforcement. Polymers, 2020, 12, 974.	4.5	20
27	CREATIVE TECHNIQUES APPLIED TO ENGINEERING SUBJECTS. , 2020, , .		0
28	Recycling dyed cotton textile byproduct fibers as polypropylene reinforcement. Textile Reseach Journal, 2019, 89, 2113-2125.	2.2	31
29	Flexural Properties and Mean Intrinsic Flexural Strength of Old Newspaper Reinforced Polypropylene Composites. Polymers, 2019, 11, 1244.	4.5	12
30	Determination of Mean Intrinsic Flexural Strength and Coupling Factor of Natural Fiber Reinforcement in Polylactic Acid Biocomposites. Polymers, 2019, 11, 1736.	4.5	24
31	Modeling the Stiffness of Coupled and Uncoupled Recycled Cotton Fibers Reinforced Polypropylene Composites. Polymers, 2019, 11, 1725.	4.5	11
32	TEMPO-Oxidized Cellulose Nanofibers: A Potential Bio-Based Superabsorbent for Diaper Production. Nanomaterials, 2019, 9, 1271.	4.1	52
33	Study on the Tensile Strength and Micromechanical Analysis of Alfa Fibers Reinforced High Density Polyethylene Composites. Fibers and Polymers, 2019, 20, 602-610.	2.1	20
34	Research on the use of lignocellulosic fibers reinforced bio-polyamide 11 with composites for automotive parts: Car door handle case study. Journal of Cleaner Production, 2019, 226, 64-73.	9.3	52
35	Interface and micromechanical characterization of tensile strength of bio-based composites from polypropylene and henequen strands. Industrial Crops and Products, 2019, 132, 319-326.	5.2	40
36	Biobased Composites from Biobased-Polyethylene and Barley Thermomechanical Fibers: Micromechanics of Composites. Materials, 2019, 12, 4182.	2.9	27

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37	Explorative Study on the Use of CurauÃ¡ Reinforced Polypropylene Composites for the Automotive Industry. Materials, 2019, 12, 4185.	2.9	18
38	Macro and micro-mechanics behavior of stifness in alkaline treated hemp core fibres polypropylene-based composites. Composites Part B: Engineering, 2018, 144, 118-125.	12.0	40
39	The role of lignin on the mechanical performance of polylactic acid and jute composites. International Journal of Biological Macromolecules, 2018, 116, 299-304.	7.5	36
40	Macro and micromechanical preliminary assessment of the tensile strength of particulate rapeseed sawdust reinforced polypropylene copolymer biocomposites for its use as building material. Construction and Building Materials, 2018, 168, 422-430.	7.2	17
41	Composites from poly(lactic acid) and bleached chemical fibres: Thermal properties. Composites Part B: Engineering, 2018, 134, 169-176.	12.0	57
42	Extending the value chain of corn agriculture by evaluating technical feasibility and the quality of the interphase of chemo-thermomechanical fiber from corn stover reinforced polypropylene biocomposites. Composites Part B: Engineering, 2018, 137, 16-22.	12.0	17
43	Approaching a new generation of fiberboards taking advantage of self lignin as green adhesive. International Journal of Biological Macromolecules, 2018, 108, 927-935.	7.5	56
44	Study of the flexural modulus of lignocellulosic fibers reinforced bio-based polyamide11 green composites. Composites Part B: Engineering, 2018, 152, 126-132.	12.0	23
45	Bio-polyethylene reinforced with thermomechanical pulp fibers: Mechanical and micromechanical characterization and its application in 3D-printing by fused deposition modelling. Composites Part B: Engineering, 2018, 153, 70-77.	12.0	89
46	Towards More Sustainable Material Formulations: A Comparative Assessment of PA11-SGW Flexural Performance versus Oil-Based Composites. Polymers, 2018, 10, 440.	4.5	18
47	Bleached Kraft Eucalyptus Fibers as Reinforcement of Poly(Lactic Acid) for the Development of High-Performance Biocomposites. Polymers, 2018, 10, 699.	4.5	12
48	Impact Strength and Water Uptake Behaviors of Fully Bio-Based PA11-SGW Composites. Polymers, 2018, 10, 717.	4.5	19
49	GAMIFICATION AS A METHODOLOGY TO INCENTIVE STUDENTS. , 2018, , .		1
50	Magnetic bionanocomposites from cellulose nanofibers: Fast, simple and effective production method. International Journal of Biological Macromolecules, 2017, 99, 29-36.	7.5	21
51	Bio composite from bleached pine fibers reinforced polylactic acid as a replacement of glass fiber reinforced polypropylene, macro and micro-mechanics of the Young's modulus. Composites Part B: Engineering, 2017, 125, 203-210.	12.0	50
52	Bleached kraft softwood fibers reinforced polylactic acid composites, tensile and flexural strengths. , 2017, , 73-90.		5
53	Behavior of the interphase of dyed cotton residue flocks reinforced polypropylene composites. Composites Part B: Engineering, 2017, 128, 200-207.	12.0	39
54	Mechanical and micromechanical tensile strength of eucalyptus bleached fibers reinforced polyoxymethylene composites. Composites Part B: Engineering, 2017, 116, 333-339.	12.0	53

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55	Sugarcane Bagasse Reinforced Composites: Studies on the Youngâ€™s Modulus and Macro and Micro-Mechanics. BioResources, 2017, 12, .	1.0	15
56	Effect of Sodium Hydroxide Treatments on the Tensile Strength and the Interphase Quality of Hemp Core Fiber-Reinforced Polypropylene Composites. Polymers, 2017, 9, 377.	4.5	29
57	Evaluation of Thermal and Thermomechanical Behaviour of Bio-Based Polyamide 11 Based Composites Reinforced with Lignocellulosic Fibres. Polymers, 2017, 9, 522.	4.5	26
58	Starch-Based Biopolymer Reinforced with High Yield Fibers from Sugarcane Bagasse as a Technical and Environmentally Friendly Alternative to High Density Polyethylene. BioResources, 2016, 11, .	1.0	13
59	Tensile Strength Assessment of Injection-Molded High Yield Sugarcane Bagasse-Reinforced Polypropylene. BioResources, 2016, 11, .	1.0	10
60	Towards a good interphase between bleached kraft softwood fibers and poly(lactic) acid. Composites Part B: Engineering, 2016, 99, 514-520.	12.0	54
61	Semichemical fibres of Leucaena collinsii reinforced polypropylene composites: Flexural characterisation, impact behaviour and water uptake properties. Composites Part B: Engineering, 2016, 97, 176-182.	12.0	24
62	Stiffness of bio-based polyamide 11 reinforced with softwood stone ground-wood fibres as an alternative to polypropylene-glass fibre composites. European Polymer Journal, 2016, 84, 481-489.	5.4	35
63	Tensile properties and micromechanical analysis of stone groundwood from softwood reinforced bio-based polyamide11 composites. Composites Science and Technology, 2016, 132, 123-130.	7.8	46
64	Polypropylene reinforced with semi-chemical fibres of Leucaena collinsii : Thermal properties. Composites Part B: Engineering, 2016, 94, 75-81.	12.0	8
65	Semichemical fibres of Leucaena collinsii reinforced polypropylene: Macromechanical and micromechanical analysis. Composites Part B: Engineering, 2016, 91, 384-391.	12.0	44
66	Semichemical fibres of Leucaena collinsii reinforced polypropylene composites: Young's modulus analysis and fibre diameter effect on the stiffness. Composites Part B: Engineering, 2016, 92, 332-337.	12.0	44
67	Orange Wood Fiber Reinforced Polypropylene Composites: Thermal Properties. BioResources, 2015, 10, .	1.0	9
68	Acoustic properties of agroforestry waste orange pruning fibers reinforced polypropylene composites as an alternative to laminated gypsum boards. Construction and Building Materials, 2015, 77, 124-129.	7.2	37
69	Flexural properties of fully biodegradable alpha-grass fibers reinforced starch-based thermoplastics. Composites Part B: Engineering, 2015, 81, 98-106.	12.0	41
70	Polypropylene composites based on lignocellulosic fillers: How the filler morphology affects the composite properties. Materials & Design, 2015, 65, 454-461.	5.1	68
71	Tensile Properties of Polypropylene Composites Reinforced with Mechanical, Thermomechanical, and Chemi-Thermomechanical Pulps from Orange Pruning. BioResources, 2015, 10, .	1.0	27
72	Elements that define the social responsibility of a product. DYNA (Colombia), 2014, 81, 175.	0.4	2

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73	Macro and micromechanics analysis of short fiber composites stiffness: The case of old newspaper fibersâ€“polypropylene composites. Materials & Design, 2014, 55, 319-324.	5.1	43
74	Study on the technical feasibility of replacing glass fibers by old newspaper recycled fibers as polypropylene reinforcement. Journal of Cleaner Production, 2014, 65, 489-496.	9.3	60
75	MEJORA DE LA ENSEÃ'ANZA Y EL APRENDIZAJE A TRAVÃ‰S DE LA EVALUACIÃ"N DE COMPETENCIAS POR MEDIO DE LA HERRAMIENTA CYCLOID. Formacion Universitaria, 2014, 7, 17-26.	0.7	0
76	Estimation of the interfacial shears strength, orientation factor and mean equivalent intrinsic tensile strength in old newspaper fiber/polypropylene composites. Composites Part B: Engineering, 2013, 50, 232-238.	12.0	66
77	Modeling of the tensile moduli of mechanical, thermomechanical, and chemiâ€thermomechanical pulps from orange tree pruning. Polymer Composites, 2013, 34, 1840-1846.	4.6	37
78	Analysis of tensile and flexural modulus in hemp strands/polypropylene composites. Composites Part B: Engineering, 2013, 47, 339-343.	12.0	52
79	High-Performance-Tensile-Strength Alpha-Grass Reinforced Starch-Based Fully Biodegradable Composites. BioResources, 2013, 8, .	1.0	9
80	High Stiffness Performance Alpha-Grass Pulp Fiber Reinforced Thermoplastic Starch-Based Fully Biodegradable Composites. BioResources, 2013, 9, .	1.0	13
81	Micromechanics of Mechanical, Thermomechanical, and Chemi-Thermomechanical Pulp from Orange Tree Pruning as Polypropylene Reinforcement: A Comparative Study. BioResources, 2013, 8, .	1.0	37
82	Biocomposites from Starch-based Biopolymer and Rape Fibers. Part I: Interfacial Analysis and Intrinsic Properties of Rape Fibers. Current Organic Chemistry, 2013, 17, 1633-1640.	1.6	4
83	Biocomposites from Starch-based Biopolymer and Rape Fibers. Part II: Stiffening, Flexural and Impact Strength, and Product Development. Current Organic Chemistry, 2013, 17, 1641-1646.	1.6	5
84	Micromechanics of hemp strands in polypropylene composites. Composites Science and Technology, 2012, 72, 1209-1213.	7.8	75
85	RESEARCH ON THE SUITABILITY OF ORGANOSOLV SEMI-CHEMICAL TRITICALE FIBERS AS REINFORCEMENT FOR RECYCLED HDPE COMPOSITES. BioResources, 2012, 7, .	1.0	8
86	Design and Development of Fully Biodegradable Products from Starch Biopolymer and Corn Stalk Fibres. Journal of Biobased Materials and Bioenergy, 2012, 6, 410-417.	0.3	7
87	BIO-BASED COMPOSITES FROM STONE GROUNDWOOD APPLIED TO NEW PRODUCT DEVELOPMENT. BioResources, 2012, 7, .	1.0	17
88	Study of the Flexural Strength of Recycled Dyed Cotton Fiber Reinforced Polypropylene Composites and the Effect of the Use of Maleic Anhydride as Coupling Agent. Journal of Natural Fibers, 0, , 1-13.	3.1	1